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CENTRAL INTELLIGENCE AGENCY WASHINGTON 25, D. C. ,

1950

OFFICE OF THE DIRECTOR

THOREDUL TO:	Director,	Psychological Strategy	Board

SUBJECT: Flying Saucers

- 1. I am today transmitting to the Mational Security
 Council a proposal (TAR A) in which it is concluded that the
 problems connected with unidentified flying objects appear to
 have implications for psychological warfare as well as for
 intelligence and operations.
- 2. The background for this view is presented in some detail in TAB B.
- 3. I suggest that he discuss at an early board meeting the possible offensive or defensive utilization of these phenomena for psychological warfare purposes.

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Osure Director

Enclosure

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PROBLEM:

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It is the purpose of this study to determine what concern to CIA, if

are president in the problem of "unidentified flying objects," and to recommend, "

if such interest is found, steps that should be taken to improve Clh's intelligence

position on expects Foliated to matical socurity.





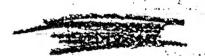
PACES BEARING ON THE PROBLEM :

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Center, Eright Field. It is from this small group that the controling collection directive to the entire Air Force originated and it is to this small group that the flood of reports on flying severs comes for collection and analysis.

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্রের প্রের্থ হয় সংগ্রামের রুপ্র হয় হয়। ১৯১১ ১৮ এই নামালের প্রক্রাম মধ্যের । তার্নির্বাধিক ব্

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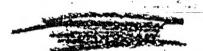
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Copied From Nearly Illegicie Warral oring into a field already charged with partosanchip, and in which objectivity had been overridden by numerous sensational writers, and one in which there are pressures for extravagent explanations as well as for oversimplification. They consulted with a representative of hir Force Special Respects group; discussed the problem with those in charge of the hir Force Project at Wright field; reviewed a considerable volume of intelligence reports; checked the Soviet press and broadcast indices; and conferred with three of our consultants at MT, all leaders in their scientific fields.

The present small seals inquiry at ATIC, which thus far has been able only is use the case history approach, exemining each incident carefully to determine the rest it can be explained or whether it must be put into the "unumplained" the seal love sealthered a perfectly valid procedure but one that effered but the sealth in spening up emplainations regarding the nature of these phenomena, at all told us, to would probably be found on the margins or just the fields of amoughories, the sealth integrand, taking into account the possibility.

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problem of concern to operations as well as to intelligence.

- 2. Operational problems are of primary importance and should be attacked at onco. They include:
- a. Taking immediate staps to improve identification of "phantoms" so that in the event of an attack, instant and positive identification of enemy reckets or plans could be made.
- b. Determination of what if any utilization should be made of these phenomena by US psychological variare planners and what, if any, defenses should be planned in articipation of Soviet attempts to utilize them.
 - 5. Intelligence problems include.
- a. Enordedge of the exact nature of these phenomena especially as rejurde:
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 - b. The present level of Russian knowledge regarding these phenomena.
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- to the detriment of US socurity interests.
 - 2. The reasons for silence in the Soviet Press regarding "flying suncers".
- 4. Intelligence responsibilities in this field as regards both collection and analysis can be discharged with maximum effectiveness only after much more



and is of such importance as to movit cognisance and action by the lational Security Council.

6. Additional work, differing in character and omnianing from that presently under may will be required to meet the specific meeds in this field of both operations and invelligence.

FROST DEBATIORS:

One of the two Secretary of action set for the below is proposed; one requires ESC action, and the other requires action by Secretary of Defence:

- 1. FSC cetion: under this operse, it is recommeded:
 - proscribes that a centrally administered research program under RD3 be ostablished, in accordance with Sec. 214 (a), Estional Security Act of 1947, this program having for its research objectives requirements to be specified by the Secretary of Defense, the Director of Contral Intelligence, and Director is abable, ical Strategy Board.
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The upon issuance of this MSC directive, CIA exercice ito funding is everything coordinated intelligence requirements and

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SUBJECT: Unidontified flying objects.

- Problem our present limited capabilities in making prompt positive visual or machanical identification of flying objects. The problem is recognized also as one which bears directly upon both offensive and defonsive capabilities of the arms forces; as one of concern to operations as well as to intelligence; and as one having possible implications for psychological warfare.
- 2. As the nature of the problem is such that a centrally administered inquiry rather than a divided effort effers the best promise of progress, the director, Research and Development Roard is charged with the responsibility of administering in this field a program of research which rests the specifications of Secretary of Defense and as regards operational requirements; of the Director of Central Intelligence, as regards the intelligence requirements and of Director, ferticalsgived Strategy board, as regards psychological warfers implications.

Illouis DCI

TO : Secretary of Defence

SULUCI: Intolligence interest in a study of unidentified flying objects.

- 1. Recordly CIA's Office of Scientific Intelligence made an inquiry into the possible intelligence implications of this subject. We concluded that while the operational problem of improvement in identification of "phantome" was of first priority because of the reed to make instant and positive identification of enemy rockets or planes, the solution of intelligence problems are of sufficient importance to justify vigorous support by this Agency of an organized attack on the problem.
- 2. In our inquiry three of our men consulted with a representative of Air force Special Projects group; discussed the problem with those in charge of the Air Force Project at Wright field; reviewed a considerable volume of intelligence reports; checked the Soviet press and breaderst indices; and conferred with three of our consultants at MT, all leaders in their solutific fields.
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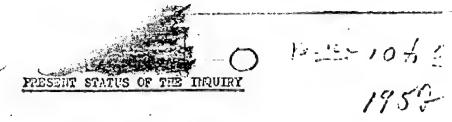
A systematic attack on the as-yet unexplained cases would contemplate a contrally coordinator program involving projects on a number of fronts and involving a variety of techniques not now used.

- 4. As the strictly US military operations problem of improved identification at home and abroad is closely tied to a number of intelligence questions, it would be advantagous to CIA, as well as to the interests of the intelligence components of Department of Defense, if intelligence research requirements could be included in any organized inquiry into the subject.
- that additional research would be necessary before it could be said whether any are susceptibel to control and can thus bentilized for either military or psychological efforces or defense, or whether any are prodictable, and can thus be taken advantage of in military or psychological operations.
- 6. It may no found that an appropriate center for such research would be in a group such as Project Lincoln which is now working for Department of Defense on trolless of air defense.
- to the this time we are unable to find any basis in our information for the contract intentions or capabilities to utilize these phenomenates the ser detriment. The Soriet Press has been silent on the subject which is

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problem, and now I should like to describe briefly how the Air Force has organized its study of reports on unidentified flying objects and outline its rethods.

The administrative unit now handling the Air Force inquiry on these

phenomena is the unidentified Flying Objects

Section of the Aircraft Propulsion Branch of the

TAD

Technical Analysis Division of Air Technical

Intelligence Center, Wright Field.

This small spectron is headed by an Air Force Reserve Captain, E. J. Ruppelt at Air Technical Intelligence Center, livil assisted by two lieutenants and two secretaries. It is from this small group that the controling collection directive to the entire Air Force originated flying small group that the flood of reports on unidentified-flying second comes for collection and analysis.

The strength and position of this central administrative group clearly indicates a low level of support, and, presumably, serious reservations in the Air Force regarding the value of extensive inquiry into the subject, Faradoxicall







this central effort at ATIC is raintained on a minimal basis while there is concurrently ordered a world-wide reporting system and an interception program which may expend hundreds of man hours and thousands of dollars.

The methods used by Air Porce are now in the process of change but the conclusions and explanations given to the public are based on the process I am going to describe.

Research and analysis at this time is limited almost exclusively to the case history method. Reports, which are limited in their coverage to ten broad elements of information, are received from the field, mainly through the Air-intelligence reporting system, though also to a limited extent from the other services and from the Department of State.

These reports come to the Unidentified Objects Section where each one and and and separately to determine whether it is explainable as "misinterprets tions of a known object", or whether it must be classed as "unexplained." and subject to further investigation.

In this sorting process, the reports are first examined in the light of established and readily available fact such as known belloon tracks or aircraft flights. The report may then be referred to an Air Force Base or to the Office





of Special Investigation for direct interrogation of the reporter. Also, in some cases the reports are referred to technical or scientific specialists for interpretation. It should be been in mind that this is all on an individual case basis.

There has been no systematic or extensive use of other standard methods of processing data. It is true that there have been a few attempts to examine some of the breader questions that have been raised by these reports. ATIC has, for example, laboriously gone through the accumulation of "unexplained" US reported the process of the plots show a high incidence of reported cases near atomic installations and Strategic Air Command bases but this might be expected because of the greater number of alort observers in such places. Actually, a number of accepted research techniques that should be used in any effort to gain a sound understanding of these phenomem, have not been employed.

There is, of course, some doubt regarding the extent and kind of effort required for the future. The Air Force has not yet found any great cause for concern. Captain Eugen's remarked that, as the problem agent to be of more concern to operations than to intelligence, it might appropriately be moved out of intelligence to some operational command. (Within the last two weeks, he

That tried, unsuccessfully, to hard the duby to Air Defense Commad.)

There are a promotion of store or store of the force considered

LOF the escential processes that might be used if Air Force considered

the inquiry worth a full blown effort, we could list the following:

It mayor to the fact in A fact the.

Research objectives thould be defined in detail in relation to the

education from the questions asked in the present collection directive are admitted to be innecessed even for the limited case-history approach. Further, the austres are not processed in such a way as to easily permit the determination of the limes of research and analysis that should be followed.

(As there has been so evolution; determination of eross of most profitable (most in the formation), a format of the which to is a factor of the important —

clements in each of the objects reported by shape, size, color, etc. or to establish categories of the objects reported by shape, size, color, etc. or to show such things as shortest, longest and average duration of sightings of objects of various kinds.

Disco destroioneles have considered are institute or oss-serviciones. There

have been metudies, for example, that would compare contain weather conditions

with the appearance of cortain colors of lights.





There are a number of standard analytical processes that might be used if

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detail the research objectives to be used in relation to the questionnaire.

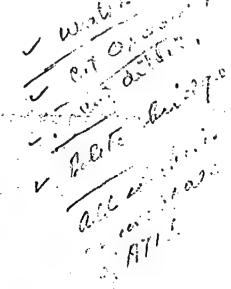
After the areas of most profitable research had been determined, a logical nex step would be to isolate the important elements in each problem area.

A third step would be to set up means by which to make many useful cross
Finally

comparisons. Fourth, trend studies as well as area studies could be made.

Finally, there might be an objective study on the attributes of available data.

In surrary, the limited central administrative support given to the project by Air Force, coupled with the extremely limited scope of the analytical work done thus far, has placed a strict ceiling on the kind of interpretations that can be rade from material now available.



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Picture of how the various phonomera may have formed patterns, either as regards aggregation or dispersal over specific periods of time.

data. Thus far, reports themselves (not factors present within these reports) are only classed "emplainable" or "not emplained". It is not known to what extent, or where, elements of consistency may extend through both the collection of "emplainable" and "not emplained" reports.

Also, there is no means by which to sort out which cleaners from otherwise "unreliable" reports, nor is there a means by which to sort out invalid elements from otherwise accurate reports. In illustration of a consequence of this limitation would be the probable unhappy fate of a valid report on what was actually ariented cloud, when observed on a well established balloon track. It would, in all probability be classed "explainable" as a balloon. The relegation of this report to the "explainable" category would take any valid elements present in the report out of the reach of later analysis.

In among, the limited control administrative support given to the project by Air Ferry, complet with the entropoly limited scope of the analytical work





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dono thus far, loads us to boliove that any broad conclusions presently drawn can be accepted only with caution.

As to the future, a limited amount of improvement may be accomplished. A roviced questionmaire, now being designed by Air Force and Battele experts will give more detail to each case-history. We have heard informally, though, that many objects are not reported in Korea because of the burden of required paper-work. A longer questionmaire would make pilots even more reluctant to report their sightings. Also, many cross comparisons will be possible if present plans to use punch cards are carried out. In addition, improvements may be expected if Air Force follows through on its present plan to establish an advisory board of top level scientists. Further, the current plan to place omphasis on using instrumentation such as refraction grid cameras and new type Schmidt tolescopes, will yield more usable facts. The absence thus for, however, of a well planted and properly guided research program mikes it appear that it may be come time in the future before we can expect complete explanations of many of these phenomen.

for the next part of our presentation, ir. Durant will discuss some of the factors that have been found, or may be involved, in these reports.



Part I - Weather Dalloons

- 1. In the analysis of Flyobrpts prior to 1 Jul 52 approximately 15% more classified as "possibly" or "probably" balloon. The basis for decision was generally little more than a form of guesswork; if the Flyobrpt did not do anything, and much leavay was allowed for observer's fallibility, that a balloon could not do in maneuvers, speed, etc., and if the description corresponded even roughly to that of a balloon, it was so classified. If there was no particular reason to believe a balloon was in the area, the report became a "possible". If the sighting occurred near a balloon launching site or on or about the launch time, it became a "probablo". It was obvious that an effort to obtain factual data to support such conclusions was in order.
- 2. ATIAN-5 approached the problem of weather balloons first. Weather balloons are of the following types:
- a. Radiosonda Rubberized tan latex, 6' in diameter at launch, up to 20' at altitude. Carries a transmitter and telegatering device for temperature pressure, dempoint sequences, which transmitter under certain conditions would give radar returns. Also carries a white running light during night launches battery operated, which should last for duration of flight. Normal ascent is to 70,000' 100,000', at ± 1,000 ft/min, at which altitude the balloon bursts and equipment recovery is effected by a red parachute.
- b. Ramin Same balloon as above, but it carries only a radar: triangle", and is a winds aloft observation.
 - c. Raminsonde Same, a combination of ramin and radioscude.
- d. Patal Same type of balloon, tracked by theodolite for winds aloft observation.
- lease and i or 5! at altitude. Burst and climb. comparable to radiosonde.

 A winds aloft observation, tracked by theodolite. Carries running light for night launches.

All types of balleons are launched at 03002, 09007, 15002 and 21002 daily. However, some stations launch one, two, three, or four times daily; others launch irregularly, some launch only one type, and others several or all. In addition, time of launch may vary approximately thirty minutes from the scheduled time, either way. All agencies which launch balloons are quick to admit that balloons can malfunction and that many are lost. In addition, wind currents at altitude can cause the balloons to assume odd shapes and strange managers. The balloons under certain atmospheric conditions can appear to be almost any color, and may be visible oven at extreme altitudes, particularly at sunrise and sunset, to an observer on the ground.

- 3. ATIMA-5, faced with this situation, ecapiled in July a file of balloon launch data cards for Air Meather Service, Mayal Air Weather Service, and Weather Eureau launch stations. In addition, this information is pictured graphically on the weather balloon launch location chart. Combining this information with the winds aloft data which ATIC receives from the facsicile charts has often provided a solution to Flyobrets. Significantly, balloons, possible and probable, increased from 15% in June to 30% in August, with 21% in July. The percentage of reports analyzed as "unknown" decreased proportionately. This gain is a real one, and results from the accumulation of the background date and the climination of guesswork.
- egencies launching believes onto MINN 31a, 31b, and 31c. For winds aloft observations, all agencies use WEAN 20 and 20a, and these forms also include the track of the balloon. All agencies forward these records to the National Weather Records Center, Grove Areada Building, Asheville, North Carolina. ATLA1-5 has reduced the CO, ATS, which maintains a detachment at Asheville, to permit "Blue Book" to deal directly with Asheville. The intention is to request photostate of the scunding (WBAN 31a, b, c) and the balloon track (WBAN 20 and 20a) at cortain specific times and places. If this is approved, ATIC will be in a position to obtain these records for every balloon flight launched in the U.S., from overseas American bases, and from all the U.S. ships and weather standons at sea. In addition, ATTA1-5 will continue to use the balloon launch information available in this office and will from time to time TWA various launch sites for specific information. These methods of approach will solve the problem of weather balloons.

Part II - Upper Air Research Balloons

- 1. Specially designed types of balloons are used by the USAF and the U.S. Navy in cooperation with various contractors to obtain upper air data for scientific purposes. There is no doubt that these balloons cause Fly-obrpts; tracking data of sleven such flights in July resulted in positive identification in three cases, probable identification in three more. The U.S. Navy, through its field representative of CMR at the University of Kinnesota, deals with three contractors. The balloons released are large white polyethylene types capable of expanding to 100° in discreter and carrying up to 500 pounds of netallic equipment. Valvo and inflation arrangements control illusting altitudes. Naturally, they are visible even at extreme altitudes under carry conditions and are capable of assuming almost any chape. The contractors often release from time to time free or attached clusters of the RA and P type rubberized balloons, as well.
- 2. These flights are often of long duration; one Einneapolis released balloon was tracked to Cape Cod and lost, then it was recovered in Fordeaux, France. They are tracked by ten EDF stations throughout the United States.
- 3. ATTA-5 has taken steps to set up a reporting system for all balloon flights of the Navy contractors. This program will be implemented 15 Oct 52 and will permanently solve the problem of U.S. Navy upper air research balloons.

h. The USAF operates two projects, "Copher" and "Moby Dick", which involve the release of the large polyethylene type balloons. In all particulars, flight durations, tracking methods, etc., those flights are comparable to the U.S. Navy projects. At present, ATIAA-5 has no communication or linious with those projects, but ATIAA-5 intends to use the same approach and reporting systems with the USAF projects as with the Maval contractors.

Conclusion:

By 1 Est 52 ATIAM-5 should be receiving complete data on all meather, Navy upper air, and USAF upper air balloon releases.

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This paper is a short introduction to the "balloon phase" of Project Blue Book. For among desiring the complete information, such as agencies and personalities involved, channels and methods of communication, etc., it will be necessary to read the following supporting papers which are on file in ATIAL-5.

a. Balloon Data Folder

- b. Miscellaneous Correspondence File Letter 5 Sep 52, to: USAF Combridge Research Conter, Combridge, Massachusetts, subj. Air Force Upper Air Research Dallon Releases, and first indersement thereto.
- c. Air Weather Service Correspondence File Letter 22 Sep 52, to: CG, AMS, subj: Climatolegy Data for Project Diug Book.
- d. U.S. Navy Correspondence File Letter, 9 Sep 52, to: Air Branch, C.R., subj: ONR Upper Air Falloon Projects, and ONR answer thereto.
 - e. Travel Report Lt A. G. Flues, 25 Aug 52 to Washington, D.C.
 - f. Travel Report Lt A. G. Flues, 15 Sep 52, to Ashaville, N.C.
- g. Travel Report -- Lt-A. G. Flues, 30 Sep 52, to tinneapolis, tinnesota.

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